**City of Bellevue**
**Development Services Department**
**Land Use Staff Report**

| | |
|---|---|
| **Proposal Name:** | Saighar 3039 Bellevue Way |
| **Proposal Address:** | 3039 Bellevue Way NE |
| **Proposal Description:** | The applicant requests a Critical Areas Land Use Permit to construct a dispersion trench within a Type-N stream structure setback and for temporary disturbance during the demolition of an existing single-family house and construction of a new single-family house. A total of 56 square feet of the stream structure setback will be disturbed and 60 square feet of the stream buffer will be restored through the removal of invasive vegetation and planting of native vegetation. |
| **File Number:** | 23-110705 LO |
| **Applicant:** | Sindiri Sai Bharat, Saighar Homes |
| **Decisions Included:** | Critical Areas Land Use Permit<br>(Process II. LUC 20.30P) |
| **Planner:** | Andy Andreotti, Assistant Land Use Planner |
| **State Environmental Policy Act Threshold Determination:** | **Exempt** |
| **Director's Decision:** | **Approval with Conditions**<br>Rebecca Horner, Director<br>Development Services<br><br>***Reilly Pittman***<br>By: ***Planning Manager***<br>Reilly Pittman, Environmental Planning Manager |

| | |
|---|---|
| Application Date: | June 1, 2023 Notice of |
| Application Publication Date: | June 22, 2023 Decision |
| Publication Date: | September 21, 2023 |
| Appeal Deadline: | October 5, 2023 |

For information on how to appeal a proposal, visit the Permit Center at City Hall or call (425) 452-6800. Appeal of the Decision must be made to the City's Clerk's Office by 5 p.m. on the date noted above for appeal deadline

**CONTENTS**



**Attachments to this Decision**

Project Plans

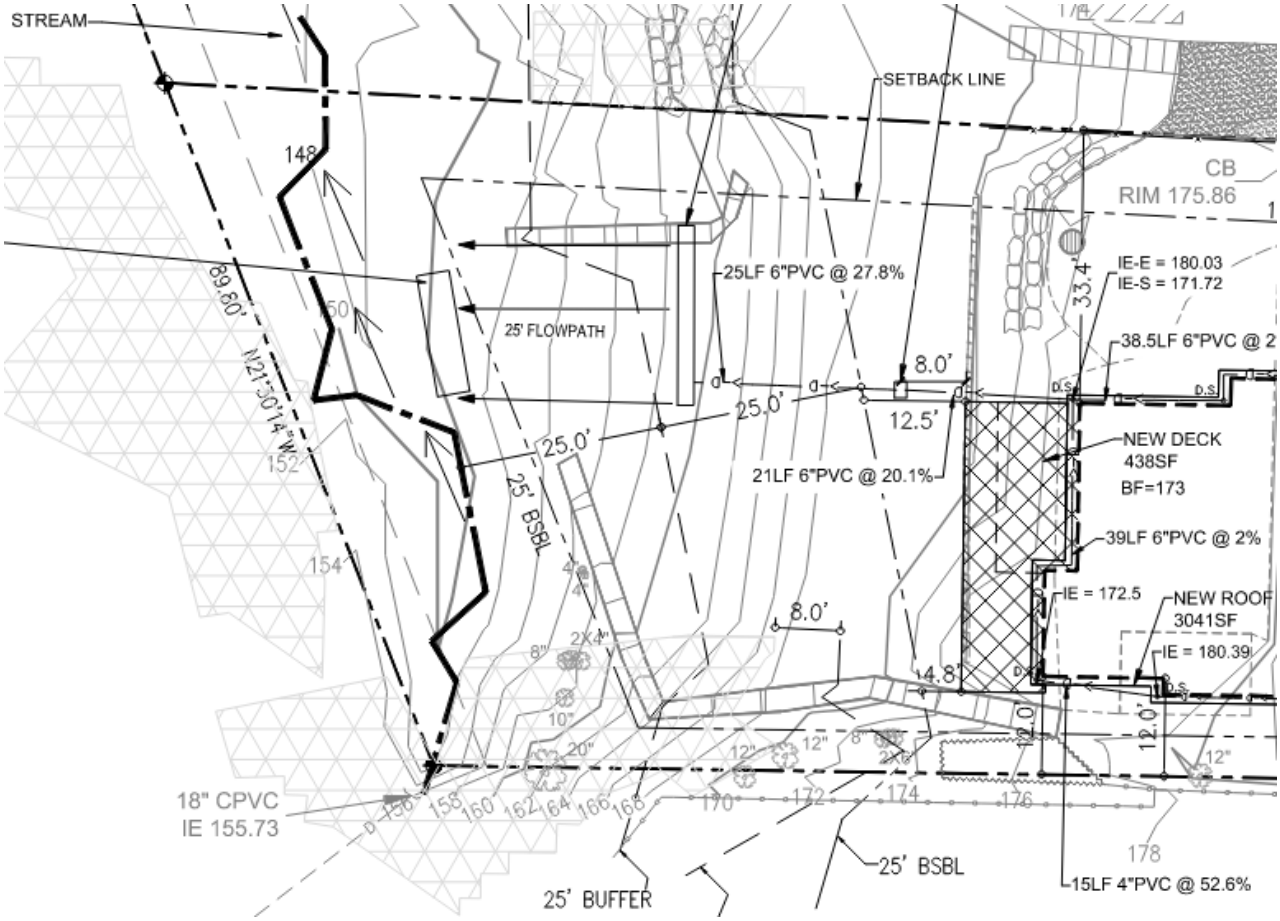
See project file for SEPA Checklist and all submitted documents and forms

## I. Proposal Description

The project proposal consists of the demolition of an existing single-family house and the construction of a new single-family house (see parcel location below in **Figure 1**). A permanent dispersion trench will be dug in the 25-foot structure setback from a Type-N stream and a temporary 6-inch diameter PVC pipe will drain stormwater from the site during construction. This will result in a total of 56 square feet of permanent and temporary disturbance to the stream structure setback. A mitigation and restoration plan proposes to remove 60 square feet of invasive vegetation from the stream buffer and replant this area with native vegetation. The proposal will involve disturbance of a stream structure setback and requires a Critical Areas Land Use Permit (CALUP) per LUC 20.25H.015. This application can be approved provided the proposal complies with the requirements in Land Use Code 20.25H (Critical Areas Overlay District). **Figure 1 below is an overview of the site, located at 3039 Bellevue Way NE. Figure 2 is a depiction of the proposed work within the stream buffer and structure setback; for full plan set, see Attachment 1.**

**Figure 1**

**Figure 2**




## II. Site Description, Zoning, Land Use Context and Critical Areas Functions and Values

### A. Site Description

The project is located on a single-family residential site developed with an existing single-family home and attached garage. The surrounding properties on the west side of Bellevue Way NE are also developed with single-family homes, with multi-family residential properties across Bellevue Way NE to the east. An unnamed Type-N stream flows south to north from a culvert just south of the site, runs just east of the western property line off the site, and ultimately empties into Yarrow Creek. There is a 25-foot buffer from the stream and a 25-foot structure setback for a total of 50-foot from the stream. There are steep slopes on site with buffers extending offsite. No work is proposed in the steep slope or top-of-slope structure setback. **See Figure 3 for vicinity map.**

**Figure 3**


**B. Zoning and Land Use Context**

The proposed project site is zoned R-3.5, a single-family residential zoning district. Surrounding properties are zoned R-3.5 on the west side of Bellevue Way NE and R-20, a multifamily residential designation, to the east. The area is developed with single-family residences, multifamily residences, and a church. The property has a Comprehensive Plan Land Use Designation of SF-M (Single Family Medium Density). The proposed project is consistent with this land use designation.

**C. Critical Areas – Functions and Values**

The proposed project will be partially located within the structure setback of a Type N stream. The Land Use Code protects critical area functions and values described below.

**i. Streams and Riparian Areas**

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and

Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow.

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi- canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted buffer is established, the near term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows into riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

## III. Consistency with Land Use Code Requirements

### A. Zoning District Dimensional Requirements

The proposed dispersal trench is not subject to the R-3.5 zoning dimensional requirements found in LUC 20.20.010. The proposed home generally meets the requirements in LUC 20.20.010, but conformance will be verified during building permit review. **See Conditions of Approval in**

**Section X of this report.**

**B. Critical Areas LUC 20.25H:**

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer.

**i. Consistency with LUC 20.25H.220 Mitigation and restoration plan requirements**

The applicant shall submit a mitigation or restoration plan for approval as part of the review of the underlying proposal. These general requirements shall be modified for areas of temporary disturbance included as part of an approved Critical Areas Land Use Permit or use or development allowed under LUC 20.25H.055, so long as the requirements of subsection H of this section are met.

**a. Plan phases**

Finding: Not applicable. Project is proposed to be completed in one phase.

**b. Restoration and mitigation project details**

The plan shall be prepared by a qualified professional and shall at minimum include the content identified in this section.

1. A written report identifying environmental goals and objectives of the restoration or compensation proposed, based on replacing or restoring the critical area and critical area buffer functions and values impacted by the proposal;

Finding: The goals of the restoration proposed are to create improved habitat for mammals, birds, and insects along the stream corridor. Native tree and plant species provide food, nesting space, and cover and shade for local wildlife. The site will achieve a net positive in ecological function through the proposed restoration.

2. Measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation or restoration project have been successfully attained and whether or not the requirements of this part have been met; and

Finding: A 5-year monitoring schedule will be established with specific criteria to measure the success and health of the native plantings within the restoration area. Criteria include the percentage of plant survival, percentage of native species cover, and percentage of invasive species cover.

3. Written specifications and descriptions of the restoration or mitigation proposed.

a. When the mitigation plan is submitted as a single-phase, or for the detailed plan phase when submitted in two phases, these written specifications shall be accompanied by detailed site diagrams, scaled cross sectional drawings,

topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

b. When the mitigation plan is submitted in phases pursuant to subsection A of this section, the written specifications may be general in nature for the conceptual phase, including general identification of areas for work, planting species, size and number. The more precise details may be provided in the detailed plan phase.

Finding: A proposed conceptual mitigation plan was provided and is sufficient for approval of the CALUP. A more detailed mitigation plan must be submitted as part of the building permit application 23-100819 BS. This shall identify the species, the size, and the location of plantings. **See Conditions of Approval in Section X of this report.**

## IV. Public Notice and Comment

| | |
|---|---|
| Application Date: | June 01, 2023 |
| Public Notice Date: | June 22, 2023 |
| 15-Day Comment Period End: | July 06, 2023 |

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on June 22, 2023. It was mailed to property owners within 500 feet of the project site. No comments were submitted.

## V. Summary of Technical Reviews

### A. Clearing and Grading

The Clearing and Grading Division of the Development Services Department has reviewed the proposed site development for compliance with Clearing and Grading codes and standards and approved the application. The project is subject to rainy season restrictions and geotechnical monitoring. **See Conditions of Approval regarding clearing and grading permit and rainy season restrictions in Section X of this report.**

### B. Utilities

The Utilities Department has reviewed the proposed site development for compliance with Utility codes and standards and approved the application.

## VI. Changes to Proposal Due to Staff Review

No changes were required.

## VII. Decision Criteria

**LUC 20.30P.140 Critical Areas Land Use Permit Decision Criteria**
The Director may approve or approve with modifications and application for a Critical Areas Land Use Permit if:

1. **The proposal obtains all other permits required by the Land Use Code; and**

   Finding: The project will obtain all permits required by the City of Bellevue Land Use Code, which include a Critical Area Land Use Permit, and the preparation of a SEPA Checklist. Review will continue under the building permit application, 23-100819 BS, which was submitted by the applicant previously.

2. **The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer; and**

   Finding: The project will not involve disturbance to the stream or stream buffer. Both permanent and temporary disturbance to the stream structure setback is necessary for construction and for the conveyance of stormwater drainage from the new house.

3. **The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable; and**

   Finding: The proposal incorporates the performance standards of City of Bellevue LUC 20.25H as discussed above.

4. **The proposal will be served by adequate public facilities including streets, fire protection, and utilities; and**

   Finding: The site is served by a shared driveway off Bellevue Way NE with adequate space for construction. Fire protection and utility connections are required to meet all applicable code standards and will be reviewed under subsequent permits.

5. **The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and**

   Finding: The proposal includes a restoration plan that is consistent with the requirements of LUC 20.25H.210 as described above.

6. **F. The proposal complies with other applicable requirements of this code**.

Finding: The proposed project will comply with all other applicable provisions outlined within the code.

## VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the construction of a stormwater dispersion trench in the stream structure setback in order to allow the construction of a new single-family home on the site as depicted in **Figure 1**. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. Any future permits and plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

**Note - Expiration of Critical Area Permit Approval:** In accordance with LUC 20.30P.150, a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a building permit or other necessary development permits within one year of the effective date of the approval.

## IX. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

| Applicable Ordinances | Contact Person |
|---|---|
| Clearing and Grading Code- BCC 23.76 | Savina Uzunow, 425-452-7860 |
| Utilities – BCC Title 24 | Jim Henderson, 425-452-7889 |
| Land Use Code- BCC Title 20 | Andy Andreotti, 425-452-6857 |
| Noise Control- BCC 9.18 | Andy Andreotti, 425-452-6857 |

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

**1. Single Family Building Permit Required:** Approval of this Critical Areas Land Use Permit does not constitute an approval of any development permit. The application for a single-family building permit, including clearing and grading review, must be approved before construction can begin. Plans submitted as part of permit application 23-100819 BS shall be consistent with the activity permitted under this approval. A final mitigation plan is required for approval with planting species, size, location, and maintenance schedule. The applicant may reference the City of Bellevue Critical Areas Handbook for information on plantings and how to locate and monitor them.

Authority: Land Use Code 20.30P.140, Clearing & Grading Code 23.76.035
Reviewer: Andrew Andreotti, Land Use Review

**2. Rainy Season Restrictions:** No clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation control measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093
Reviewer: Savina Uzunow, Clearing & Grading

**3. Geotechnical Review:** The project geotechnical engineer must review the final plans, including all foundation, retaining wall, shoring, and vault designs. A letter from the geotechnical stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit.

Authority: Clearing & Grading Code 23.76.050
Reviewer: Savina Uzunow, Clearing & Grading

**4. Geotechnical Monitoring:** The project geotechnical engineer of record or his representative must be on site during critical earthwork operations. The geotechnical engineer shall observe all excavations and fill areas. In addition, the engineer shall monitor the soil cuts prior to construction of rockeries and verify compaction in fill areas. The engineer must submit field report in writing to the DSD inspector for soils verification and foundation construction. All earthwork must be in general conformance with the recommendations in the geotechnical report.

Authority: Bellevue City Code 23.76.160
Reviewer: Savina Uzunow, Clearing & Grading

## ZONING ANALYSIS

PROPERTY INFO
PLAN# 2217, SAIGAR BELLEVUE WAY
ADDRESS: 3039 BELLEVUE WAY NE BELLEVUE, WA 98004
PARCEL # 1025069102
ZONE: R-3.5

SETBACKS:
FRONT 20'
SIDES 15/5' MIN.
REAR 25'

| | |
|---|---|
| MAX. HEIGHT | 30' |
| MAX. HARD SURFACE | 75% |
| MAX. IMP. SURFACE | 45% |
| MIN. GREENSCAPE | 30% |
| MAX. STRUCTURE IMP. | 35% |

## LEGAL DESCRIPTION:

PORTION NW QTR OF SW QTR STR 20-25-05 DAF: COMMENCING ON NORTH LINE SD SUBD 383 FT EAST OF NW CORNER THOF, SD PT OF COMMENCEMENT BEING AT NE CORNER OF PLAT OF VALLEYHI TH S 01-30-43 W ALONG EAST LINE OF SD PLAT 110 FT TH S 88-29-17 E ALONG SD EAST LINE 31.50 FT TH S 21-30-14 E ALONG SD EAST LINE 18.49 FT TO SW CORNER CITY OF BELLEVUE SHORT PLAT NO 90-2153 REC NO 9110099005 TH CONTG S 21-30-14 E ALONG SD EAST LINE 76.89 FT TO POB TH CONTG S 21-30-14 E ALONG SD EAST LINE 89.80 FT TO NW CORNER OF LOT 2 SD PLAT TH S 89-09-05 E ALONG NORTH LINE SD LOT 2 & LOT 1 SD PLAT 192 FT TO WLY MGN 104TH AVE NE TO NON-RADIAL INTERSECTION WITH ARC OF CURVE CONCAVE TO EAST FROM WHICH 1179 CENTER BEARS S 86-07-18 E 2924.93 FT TH NLY ALONG ARC OF SD CURVE & MGN THRU C/A OF 01-28-30 DISTANCE OF 74.78 FT TH N 87-03-39 W 231.22 FT TO POB -AKA LOT C CITY OF BELLEVUE BOUNDARY LINE ADJUSTMENT NO 91-9411 REC NO 9807099008

## SITE PLAN KEY NOTES:

1. EXISTING RESIDENCE TO BE REMOVED
2. PROPOSED RESIDENCE
3. PROPOSED CVRD PORCH
4. RESIDENCE ENTRANCE
5. RESIDENCE CVRD DECK
6. EXISTING HARD SURFACE
7. EXISTING ROCKERY TO REMAIN
8. EXISTING ROCKERY TO BE REMOVED
9. EXISTING HARD SURFACE TO BE REMOVED
10. STOCK PILE AREA COVER PER CITY
11. CLEARING LIMITS
12. FILTER FENCE TYP. - SPREAD STRAW MULCH OVER EXPOSED SOIL AS NEEDED OR PER CITY INSPECTOR
13. EXISTING STREAM
14. PROPOSED FENCE LINE
15. PROPOSED GATE
16. PROPERTY ENTRANCE
17. CONSTRUCTION ENTRANCE 15'X25' W/ 2"-4" QUARRY SPALLS
18. HEAT PUMP LOCATIONS
19. EXISTING SHED TO BE REMOVED

0 10' 20' 40'
SCALE: 1" = 20'

## LOT COVERAGE BY STRUCTURE

| | | |
|---|---|---|
| PROPOSED HOUSE W/ GARAGE | 2,737 | S.F. |
| PORCH | 88 | S.F. |
| DECK & STAIRS > 30" ABOVE GRADE | 438 | S.F. |
| TOTAL | 3,263 | S.F. |
| TOTAL LOT S.F. | 18,603 | |
| CRITICAL AREA & BUFFER | -9,245 | S.F. |
| LOT S.F. | 9,358 | S.F. |
| % OF LOT | 34.8 | % |

1

## IMPERVIOUS SURFACE COVERAGE

| | | |
|---|---|---|
| ALL ROOFS (INCLUDING EAVES) | 3,041 | S.F. |
| DRIVEWAY | 1,131 | S.F. |
| WALKWAYS | 137 | S.F. |
| PATIOS | 20 | S.F. |
| RETAINING WALL AREAS | 000 | S.F. |
| TOTAL | 4,329 | S.F. |
| TOTAL LOT S.F. | 9,358 | S.F. |
| % OF LOT | 46.3 | % |

2

## GREENSCAPE

| | | |
|---|---|---|
| TOTAL AREA OF FRONT SETBACK | 2,970 | S.F. |
| HARDSCAPE | 1,176 | S.F. |
| GREENSCAPE | 1,794 | S.F. |
| % GREENSCAPE IN FRONT SETBACK | 39.5 | % |

## FAR CALCULATIONS

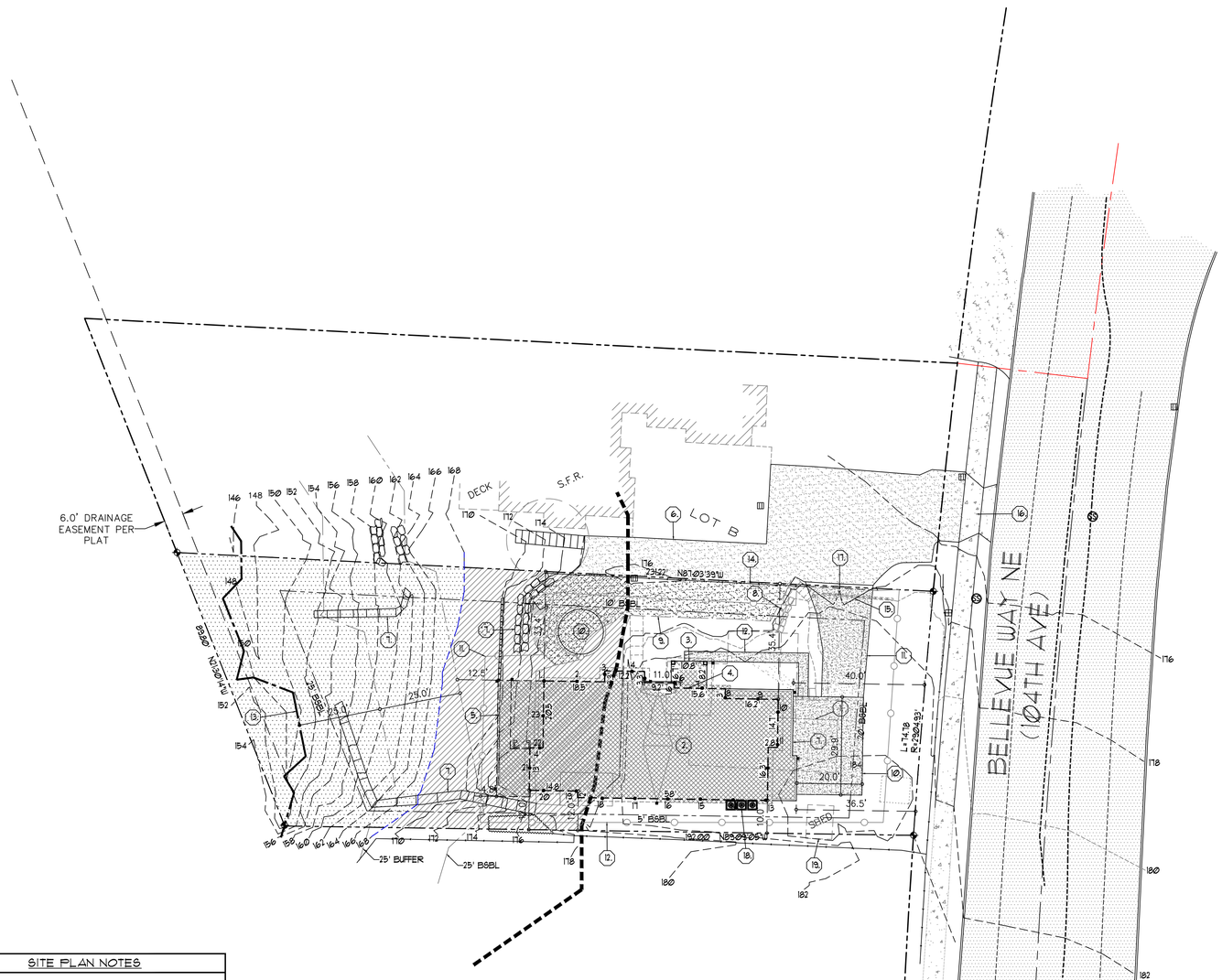
| | | |
|---|---|---|
| BASEMENT FLOOR | 284 | S.F. |
| FIRST FLOOR (INCLUDING GARAGE) | 2615 | S.F. |
| SECOND FLOOR | 2129 | S.F. |
| TOTAL ECLOSED SF (FROM OUTSIDE EXTERIOR WALL IN) | 5028 | S.F. |
| TOTAL LOT SF | 18,603 | S.F. |
| FAR | 27 | % |

## SPOT ELEVATIONS FOR HEIGHT CALCULATION

| | | | |
|---|---|---|---|
| 1. | 174.3 | TOTAL = 4142.3 / 23 AGE. | =180.1 |
| 2. | 175 | MAIN FINISH FLOOR | =183 |
| 3. | 175.6 | PEAK OF ROOF | =208 |
| 4. | 182 | ALLOWABLE BUILDING HEIGHT | =210.1 |
| 5. | 182.1 | | |
| 6. | 182.4 | | |
| 7. | 182.5 | | |
| 8. | 182.7 | | |
| 9. | 182.7 | | |
| 10. | 183 | | |
| 11. | 183.6 | | |
| 12. | 183.7 | | |
| 13. | 183.7 | | |
| 14. | 183 | | |
| 15. | 182.6 | | |
| 16. | 182.6 | | |
| 17. | 182.2 | | |
| 18. | 179.5 | | |
| 19. | 177.6 | | |
| 20. | 177.2 | | |
| 21. | 176.6 | | |
| 22. | 174.4 | | |
| 23. | 173.3 | | |

## LEGEND

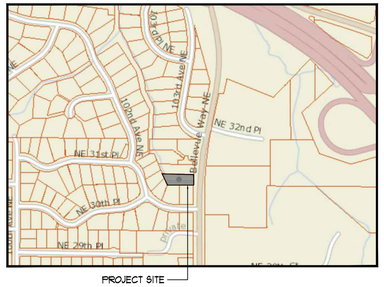
- PROPERTY CORNER
- WTR — WATER
- SWR — SEWER
- SETBACK
- PROPERTY LINE
- EXISTING CONTOURS
- EROSION CONTROL FENCING
- PROPOSED ADDITION
- EXISTING HARD SURFACE TO BE REMOVED
- CRITICAL AREA (4)
- 50' BUFFER
- FENCE
- DOWNSPOUT




## SITE PLAN NOTES

1. OWNER/ CONTRACTOR TO VERIFY ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS ON THE SITE BEFORE PROCEEDING WITH WORK.
2. FOR ROOF GUTTERS AND DOWNSPOUTS PER PLAN
3. SLOPE DRIVEWAY & GRADE AWAY FROM BUILDING 2%, WITHIN 10' OF STRUCTURE.
4. ALL NEW UTILITIES SHALL BE RUN UNDERGROUND AS REQ'D.
5. ALL DETAILS SHALL BE VERIFIED WITH CURRENT PLAT MAP ON FILE WITH THE CITY, STATE, OR COUNTY AS REQUIRED.

## VICINITY MAP




RR DESIGN LLC
RECTOR RESIDENTIAL DESIGN
EMAIL: paul@rectordesigns.com
PHONE: (253) 332-6244

# SITE PLAN

SAIGAR BELLEVUE WAY
3039 BELLEVUE WAY NE
BELLEVUE, WA 98004



## REVISIONS

| INT. | DATE | REV. |
|---|---|---|
| - | - | - |
| | | |
| | | |
| | | |

| | |
|---|---|
| DESIGNER: | Ø |
| DRAFTER: | Ø |
| CHECKED: | Ø |
| DATE: | 4.6.23 |

PROJECT NO: 2217

SHEET NO:
A0/12

CONFLUENCE
ENVIRONMENTAL COMPANY

# 3039 Bellevue Way NE
# MITIGATION PLAN

*Prepared for:*

**SaiGhar Homes**
May 24, 2023

146 N Canal Street, Suite 111 • Seattle, WA 98103 • www.confenv.com

This page intentionally left blank
for double-sided printing

# 3039 Bellevue Way NE
# MITIGATION PLAN

Prepared for:

SaiGhar Homes
Mr. Sindiri Bharat
13009 SE Newport Way
Bellevue, WA 98006

Authored by:

Suzanne Vieira, WPIT, CESCL
Confluence Environmental Company

May 24, 2023

This report should be cited as:

Confluence (Confluence Environmental Company). 2023. 3039 Bellevue Way NE mitigation plan. Prepared for SaiGhar Homes, Bellevue, Washington, by Confluence, Seattle, Washington.

# TABLE OF CONTENTS



## TABLES



## FIGURES

# 1.0 INTRODUCTION

Confluence Environmental Company (Confluence) conducted a site reconnaissance and assessment to create a mitigation plan for the proposed development at 3039 Bellevue Way NE, Bellevue, Washington (tax parcel number 2025059012). SaiGhar Homes (the client) proposes to remove the existing single-family residence on this parcel and replace it with a new single-family home. See Figure 1 for the proposed site development plan with critical areas and buffers. Prior to Confluence's involvement with this project, the client had addressed and confirmed several site- and permit-related details with the City of Bellevue (the City). These include the on-site stream type and its associated critical area buffer, the appropriate building setback, and the location of steep slopes and their buffers. Therefore, Confluence has not conducted a critical areas study for this property and will only provide recommendations for mitigating those impacts that occur within the stream critical area buffer.

On May 16, 2023, a Confluence biologist conducted a brief site reconnaissance and mitigation-potential assessment to determine the existing site condition and the mitigation potential of the property. This report discusses the site condition and provides a mitigation plan for the proposed project. This mitigation plan will be submitted to the City for acceptance.

# 2.0 EXISTING SITE CONDITION

The project parcel is currently developed with a single-family residence in the eastern portion and a driveway that is shared with the property to the north. The central and western portions of the property are terraced with retaining walls, the easternmost of which is currently failing. The western half of the parcel is largely vegetated with a variety of non-native and invasive species, including cherry laurel (*Prunus laurocerasus*), English holly (*Ilex aquifolium*), Himalayan blackberry (*Rubus armeniacus*), field bindweed (*Convolvulus arvensis*), creeping buttercup (*Ranunculus repens*), and dandelion (*Taraxacum officinale*). Because the buffer is dominated by non-native species, many of which are herbaceous and not persistent, the buffer functions are lower than they could be if the vegetation profile was composed of native, woody species.

An unnamed stream (Stream A) runs from south to north along the western edge of the parcel. This stream has not been given a stream type by either King County or the Washington Department of Natural Resources (WDNR) (King County 2023, WDNR 2023). However, through discussions with the City, this stream was determined to be a Type Np water on site that flows into a Type F water downstream. Per communications between the client and the City, the mapping of the on-site stream, as shown in Figure 1, has been accepted by the City. It enters the site from a culvert immediately southwest of the property line. Stream A is approximately 1 to 2 feet wide where it occurs on the project parcel. Stream A continues to flow to the north and under State Route 520 where it ultimately flows into the Yarrow Bay Wetlands.

This page intentionally left blank
for double-sided printing

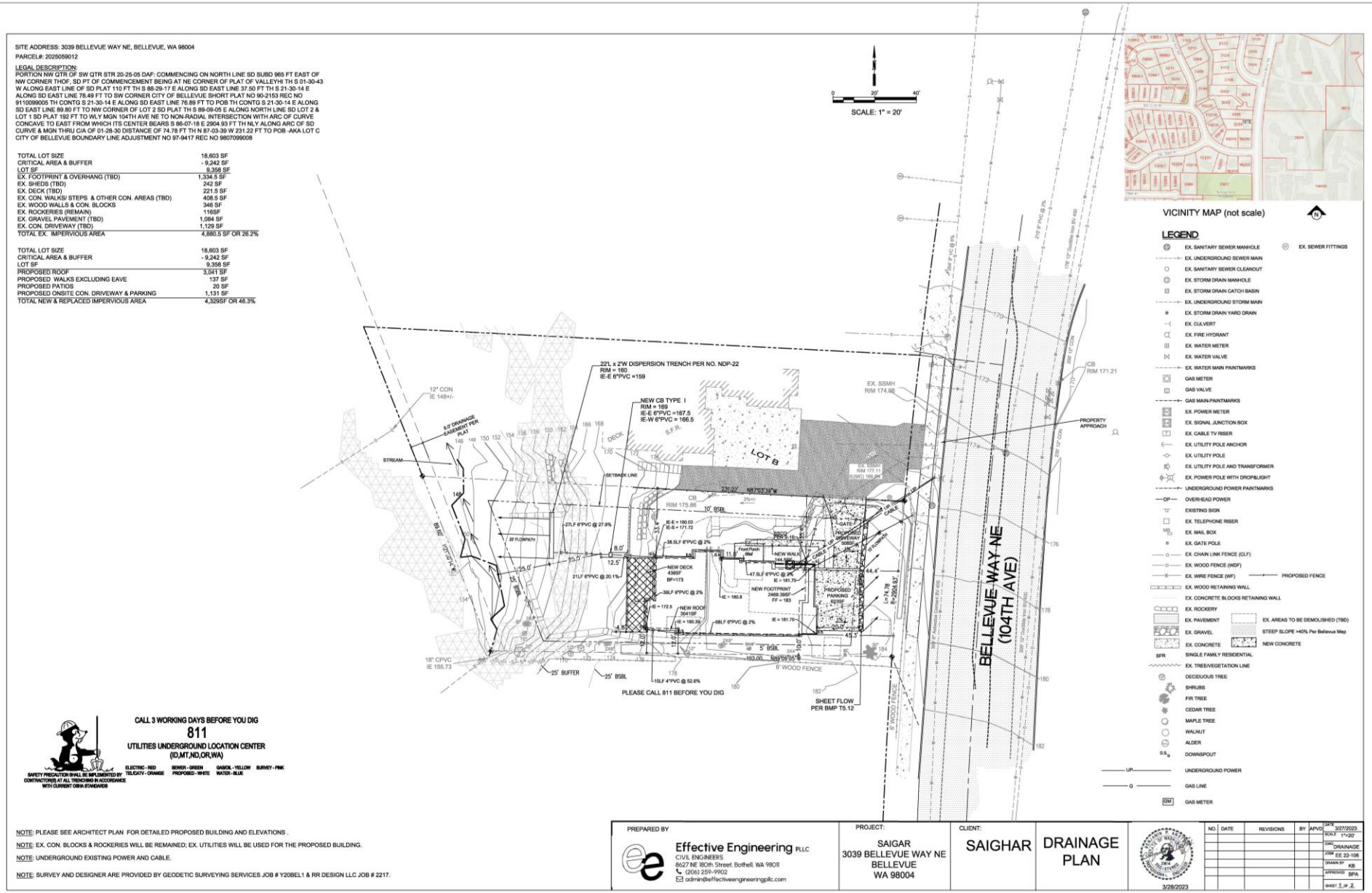



**Figure 1. Site development plan with drainage detail (source: Effective Engineering, PLLC 2023)**

This page intentionally left blank
for double-sided printing

Per Bellevue Municipal Code (BMC) Land Use Code (LUC) 20.25H.075(C), on a developed site, a Type N stream has a critical area buffer of 25 feet. Per LUC 20.25H.075(D), on a developed site, a Type N stream has a structure setback of 25 feet. In total, the buffer and setback create a 50-foot-wide boundary around Stream A in the western portion of the project parcel. The stream buffer and setback are shown in Figure 1. The buffer associated with the area of steep slopes on the property was determined to extend offsite, and therefore neither the steep slope critical area nor the steep slope buffer will be impacted by the proposed project. The City has agreed that there are no impacts to or mitigation needed for steep slopes associated with this project.

## 3.0 PROJECT IMPACTS

Within the 25-foot structure setback, the project proposes to construct a stormwater dispersion trench that is 22 feet long and 2 feet wide (total area of 44 square feet). The stormwater supplied to the dispersion trench will travel through a 27-linear-foot, 6-inch-diameter PVC pipe. Only 23 feet of this pipe will occur within the building setback for an approximate area of 11.5 square feet. The dispersion trench is a permanent impact to the setback area, and the stormwater pipe is a temporary impact that will be trenched into the ground with the ground surface being restored upon project completion. In total, the temporary and permanent impacts cover approximately 56 square feet. No other impacts will occur within the structure setback.

The proposed project will not result in impacts to the 25-foot stream critical area buffer.

## 4.0 PROPOSED STREAM BUFFER MITIGATION

Per LUC 20.25H.085(A), the City prefers that mitigation plans for impacts to stream critical area buffers provide mitigation to critical area functions and values first through on-site replacement and second through on-site enhancement of the remaining buffer. Per LUC 20.25H.085(B), disturbed critical area buffer shall be replaced at a ratio of 1:1. For the purposes of this plan, it is assumed that the structure setbacks outlined in LUC 20.25H.075(D) are treated similarly to the critical area buffers outlined in LUC 20.25H.075(C).

Per LUC 20.25H.215, proposed projects must use mitigation sequencing to make all reasonable efforts to avoid and minimize impacts to critical areas and their buffers. When proposed projects alter critical areas or their buffers, such alteration shall be avoided, minimized, or compensated for. Although the project will cause an unavoidable impact to the stream setback to provide stormwater drainage, this impact has been minimized to the greatest extent possible while still meeting the stormwater need and the geotechnical site constraints as outlined by the Geotechnical Engineering Report (GeoResources 2023). The alternation will be mitigated through on-site enhancement of the stream critical area buffer and through monitoring.

To offset the 56 square feet of permanent and temporary impacts to the 25-foot structure setback associated with Stream A, this plan proposes to enhance a total of 60 square feet of the 25-foot stream buffer. The proposed enhancement area and areas of impact are shown in Figure 2. Enhancement will include the removal of invasive and non-native species and the planting of native vegetation. Invasive and non-native species to be removed include cherry laurel, English holly, Himalayan blackberry, field bindweed, creeping buttercup, and dandelion. These species shall be manually weeded from the mitigation area prior to planting with native species. Ongoing maintenance of weeds is discussed in Section 7.0.

The planting plan for the 60-square-foot enhancement area includes a total of 17 native plants across 4 species planted at a 2-foot on center planting density, as shown in Table 1. These species were chosen based on their habitat benefits for wildlife, including large and small mammals, birds, insects, and fish. These species provide fruit and forage for mammals and birds, pollen for insects, nesting and perching opportunities for birds, cover opportunities for birds and mammals of all sizes, and overwater shade for fish in Stream A. During installation, the plants will be field-fit within the designated mitigation area.

**Table 1. Mitigation planting plan**

| Species Name | Common Name | Container Size | Spacing | Quantity | Benefit |
|---|---|---|---|---|---|
| Rubus spectabilis | Salmonberry | 1 gallon | 2 ft O.C. | 5 | Provides fruit and forage for wildlife. Provides nesting habitat and cover for birds. |
| Salix sitchensis | Sitka willow | 1 gallon | 2 ft O.C. | 5 | Provides forage and cover for wildlife and birds. Provides pollen for insects and nesting opportunities for birds. |
| Rosa nutkana | Nootka rose | 1 gallon | 2 ft O.C. | 5 | Provides fruit and forage for wildlife. Provides nesting habitat and cover for birds. |
| Picea sitchensis | Sitka spruce | 2 gallon | 2 ft O.C. | 2 | Provides vegetation structure and nesting opportunities for wildlife. Provides shade and cover. Provides some browsing opportunities for large mammals. |
| O.C. = on center | | | | | |

The impact will occur approximately 26 feet from the stream at the closest point and therefore will occur in the structure setback and not the stream buffer. However, enhancement of the stream buffer within 25 feet of the stream will provide a larger ecological lift compared to enhancement further from the stream in the structure setback or beyond the setback because the proximity of the native plants to the stream will provide a greater opportunity to both shade and provide organic inputs to the stream. These benefits support the benthic invertebrate community and general habitat condition.

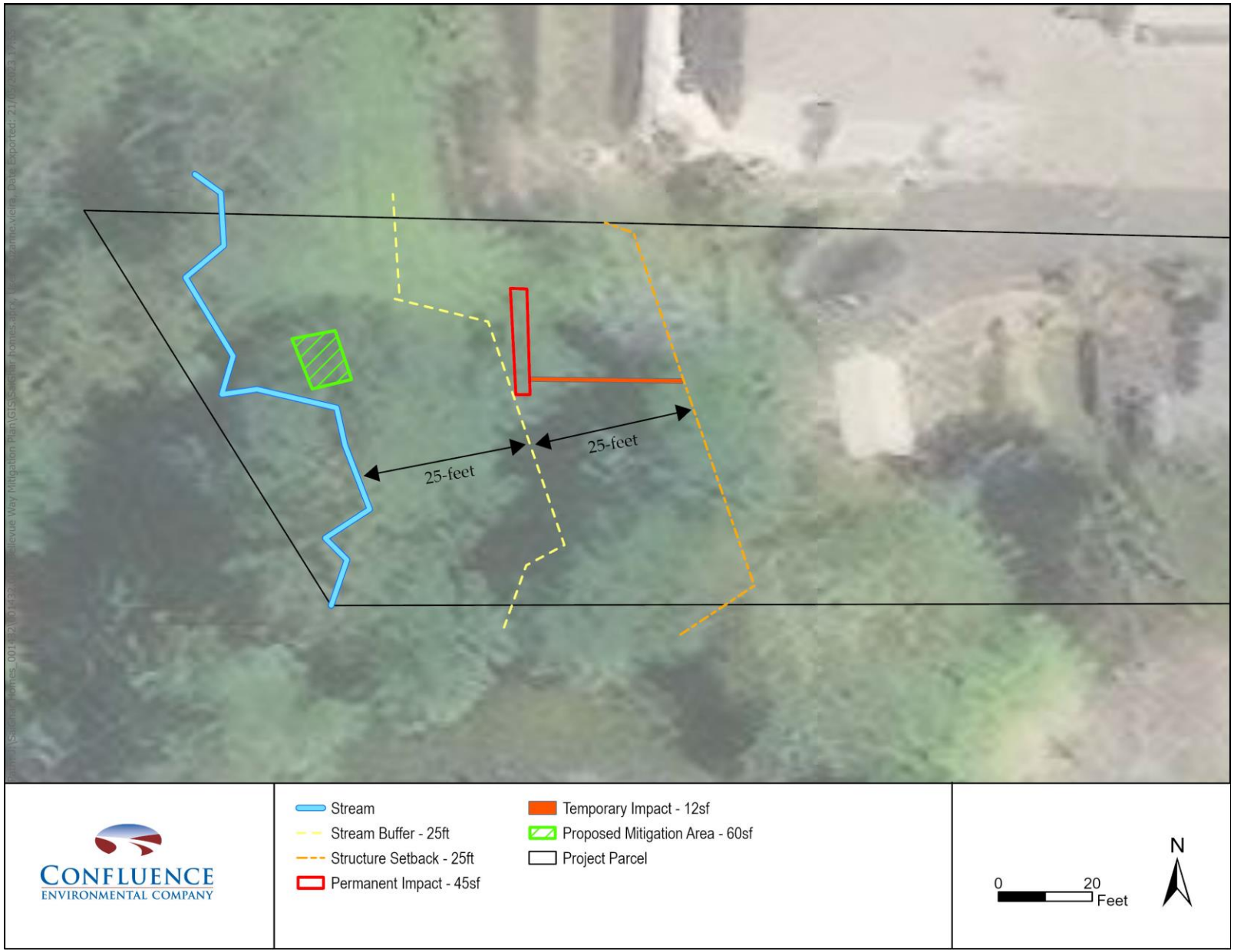



**Figure 2. Proposed mitigation plan.**

This page intentionally left blank
for double-sided printing

# 5.0 PERFORMANCE STANDARDS

To comply with BMC LUC 20.25H.220, monitoring of the mitigation area will be conducted yearly for a period of 5 years to determine if the stream buffer is on a trajectory to meet the performance standards outlined in this section, as required by LUC 20.25H.220(B). The success criteria for the following performance standards are summarized in Table 2.

**Table 2. Summary of success criteria**

| Performance Standard | Success Criteria | | | | | |
|---|---|---|---|---|---|---|
| | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| PS1—Plant Survival (%) | NC | 100 | 80 | 70 | NC | NC |
| PS2—Native Species (% cover) | NC | NC | NC | 50 | 70 | 80 |
| PS3—Invasive Species* (% cover) | NC | ≤20 | ≤20 | ≤20 | ≤20 | ≤20 |

* Source: King County NWCB 2023 (or latest version)
PS Performance standard
NC No criterion; may be used as baseline information

## 5.1 Performance Standard 1—Plant Survival

Planted vegetation and natural recruits will be monitored for survival for 3 years (Year 1, Year 2, and Year 3). Monitoring will not occur after Year 3 because it is expected that plant growth will make identifying planted vegetation extremely difficult. Monitoring will occur in the fall before deciduous leaves have dropped for easier identification.

## 5.2 Contingency Measure 1

Plant survival could be negatively affected by improper installation, diseased or infested plants, inadequate watering, or extreme weather. If more than 25% of new plantings die in a single year, the cause of the high losses will be investigated and corrected before dead plants are replaced. Dead plant material will only be removed after that year's scheduled monitoring.

## 5.3 Performance Standard 2—Native Plant Cover

Planted vegetation and natural recruits will also be monitored for percent cover for 3 years (Year 3, Year 4, and Year 5). Monitoring will occur in the fall before deciduous leaves have dropped for easier identification.

## 5.4 Contingency Measure 2

Plant growth, as determined by percent cover, could be negatively affected by improper installation, diseased or infested plants, inadequate watering, or extreme weather. If the percent

cover success criterion is not met, the cause will be investigated and corrected. Correction measures may include increased watering, soil amendments, fertilizing, or revision of planting palette and additional plantings.

## 5.5 Performance Standard 3—Invasive Species Cover

The percent cover of invasive species will be monitored for 5 years (Year 1, Year 2, Year 3, Year 4, and Year 5). Monitoring will occur in the fall before deciduous leaves have dropped for easier identification.

## 5.6 Contingency Measure 3

Dominance by invasive species could result from the disturbance of the soil, a high mortality rate of the native planted vegetation, or colonization by windborne seeds. To reduce colonization by invasive species, a site maintenance plan is described in Section 7.0. If more than 25% of area is covered by invasive species, the cause of infestation will be investigated, and corrective actions will be taken before weeds are removed. Contingency measures could include increasing the frequency of weeding until native vegetation can grow and dominate the area or increasing the density of native vegetation with additional plantings.

# 6.0 MONITORING PLAN

A monitoring period of 5 years is proposed to ensure that the enhanced stream buffer meets the performance standard success criteria of LUC 20.25H.220. A Year 0 (or "as-built") report will serve as the baseline for future monitoring events.

## 6.1 Year 0 Monitoring

Data collected in Year 0 will provide the baseline for the success criteria for Years 1 through 5 monitoring. There are no success criteria associated with Year 0.

Confluence will use a global positioning system (GPS) to record the location of each installed plant. An as-built map of installed plants will then be used in subsequent monitoring events to determine plant survival.

## 6.2 Annual Fall Monitoring

Following are the methods to be used for the annual fall monitoring.

### *6.2.1 Plant Survival*

Interim and final success will be defined as meeting the success criteria for the plant survival performance standard shown in Table 2. Plant survival will be recorded within the mitigation area by comparing the number and species of plants recorded on the as-built drawings to site conditions at the time of monitoring. The percent survival will be calculated by dividing the

number of plants (by species) identified as alive during the monitoring event by the number of plants (by species) identified on the as-built plan.

It is the expectation that all plants be monitored for survival for 3 years, so if plants are installed after Year 0, then those plants will be monitored for survival for 3 consecutive years, which may require monitoring to occur after Year 3.

#### 6.2.2 Native and Invasive Species

Interim and final success will be defined as meeting the success criteria for the native and invasive species performance standards shown in Table 2. Given the small size of the mitigation area, the entire mitigation area will be treated as a plot for determining percent cover. The percent cover of tree, shrub, and herbaceous species, including bare ground, will be estimated and recorded.

#### 6.2.3 Site Photographs

One or 2 photo points will be established at the mitigation area. At each of the photo points, a fixed-lens digital camera will be used to take photographs, either a panoramic photo or 1 at every 90 degrees of the compass.

### 6.3 Reporting

Confluence will prepare 6 reports over a 5-year period, including one Year 0 report and 5 annual progress reports.

#### 6.3.1 Year 0 Report (As-Built)

The Year 0 report and as-built drawing will be completed within approximately 30 days after buffer enhancement site construction is completed. One copy of the report will be provided to the City. The following will be included in the report:

- Actual planting schedule (density, container size)
- Coordinates of actual location of transects and photo points
- Location of transects and photo points depicted on a figure
- Location of installed plants depicted on a figure
- Description of changes from original site design

#### 6.3.2 Annual Progress Reports

For each fall monitoring event, Confluence will prepare a report documenting whether the performance standard success criteria listed in Table 2 have been met. One copy of each report will be provided to the City. The following will be included in each report:

- Data tables

- Species lists
- Date of survey
- A narrative description of methods and contingency measures taken
- Identification of planted and naturally-recruited trees and shrubs
- Interpretation of results
- Recommendations for additional plantings, if needed
- Recommendations for additional maintenance, if needed
- Color photos

All annual progress reports will be submitted within approximately 60 days of conducting the monitoring survey.

## 7.0 MAINTENANCE

Maintenance activities will include, but are not limited to, vegetative maintenance (including watering, replanting, weed control around plantings, control of invasive species) and general maintenance.

### 7.1 Watering

The plantings will be watered at the time of plant installation. Monthly watering may be necessary during the first, second, and third summers after plant installation to assist survival and establishment of plantings. If replacement plants are installed, a similar watering schedule will occur.

How watering occurs will be determined by the contractor overseeing the maintenance of the enhancement area. For example, watering could occur via the residence's garden hose or the installation of an irrigation system.

### 7.2 Weeding

Weeding around trees and shrubs will be important during the growing seasons to ensure establishment and prevent stress to the plants from competition for resources. Weeding will occur at least annually. All invasive and noxious, non-native species will be weeded. This schedule of weeding will occur until the plants have established themselves and outcompete the invasive species. Herbicides should not be required to maintain weeds on this site.

### 7.3 Mulching

Mulching with weed-free woodchips may occur around shrub and tree plantings to help retain water and exclude weeds. Mulch will be placed when plants are installed, and additional mulch may be placed as needed throughout the monitoring period. Mulch around plantings will be no thicker than 4 inches.

## 7.4 Dead Plant Removal

Dead plant material will only be removed after scheduled monitoring. This will allow for the accurate assessment of planting success needed for the monitoring program and to aid in determining why the plants did not survive. Replacement planting will be detailed in a section of the monitoring report for the year.

This page intentionally left blank
for double-sided printing

# 8.0 REFERENCES

Effective Engineering, PLLC. 2023. Saighar drainage plan, 3039 Bellevue Way NE, Bellevue, WA 98004. Prepared for SaiGhar Homes, Bellevue, Washington, by Effective Engineering, PLLC, Bothell, Washington.

GeoResources. 2023. Geotechnical engineering report proposed single-family residence 3039 Bellevue Way Northeast. Created by GeoResources, Fife, Washington, for SaiGhar Homes, Bellevue, Washington. Document ID: Saighar.BellevueWayNE_3039.RG

King County. 2023. King County iMap interactive mapping tool. King County GIS Center, Seattle, Washington. Available at: http://www.kingcounty.gov/operations/GIS/Maps/iMAP.aspx (accessed on May 19, 2023).

King County NWCB (Noxious Weed Control Board). 2023. 2023 King County noxious weed list. King County Department of Natural Resources and Parks Water and Land Resources Division, Seattle, Washington. Available at: https://kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/laws/list.aspx (accessed May 19, 2023).

WDNR (Washington Department of Natural Resources). 2023. Forest practices application mapping tool (online database). Olympia, Washington. Available at: https://fpamt.dnr.wa.gov/default.aspx# (accessed on May 19, 2023).


CONFLUENCE
ENVIRONMENTAL COMPANY